ing for more notes. Mr. Stephen J. Adams, Cornish, Maine, desires any and all notes from all sections of the country at once so that the work of compiling may begin. Any note you may have will be a welcome addition to his report.

I am glad to refer you to the announcement of the Committee on Geographical Distribution, which appears in this issue. Read it and act upon its suggestions.

Lynds Jones, Chairman of Work.

## COMMITTEE ON GEOGRAPHICAL DISTRIBUTION.

## FURTHER MECHANICAL HELPS TO OBSERVATION.

Several of our members having taken so kindly to the suggestions made in BULLETIN NO. 14 with reference to *daily horizons* and bird *censuses*, I venture to submit other ideas along the same line. By speaking of mechanical helps, I do not refer to instruments which observers may use, such as opera glasses, camera, etc., (purposely omitting the shot-gun), but rather to those schemes or methods of study which may fairly be called mechanical.

First in importance after those already discussed I should place the *annual horizon*, or local list for the year. This may be, if you please, a formal list, such as the U. S. Dept. of Agriculture provides for in its migration blanks, or it may simply be indicated by a series of consecutive numbers, running through your note-book. For my part, I employ the latter method, throwing a circle around each number; so as to make it stand out from the page, and catch the eye in hasty reference.

Always record first appearances, no matter what the season or what its possible bearing on migration. By so doing one gets into the way of expecting old bird friends, and refuses to be satisfied until he has seen them. So too, one gets the winter residents straightened out in his mind, and notes untimely appearances that would be overlooked by the man who is jotting down only migration records in the height of the season. Begin on the first day of January, if possible, and follow it through, according to opportunity, until the 31st day of December.

This annual horizon should have a definite local significance; that is, the limits of observation should be decided upon at the beginning of the year and adhered to throughout. Such a section as one expects to frequent the most will of course be chosen. Many valuable and instructive lists have been taken in such circumscribed areas as a village garden or a water-works pond. A county, however, makes a natural and convenient division for those who find it possible to cover so much ground. Here at Oberlin we try to hold ourselves answerable for Lorain county, by making frequent excursions to the most favorable points.

As an example, I may cite my personal Lorain county horizon for the year 1897. By March 1st, I had recorded 28 species; by June 1st, 137 species; by Sept. 1st, only 139; and by Dec. 31st, 146 species.

Such annual local horizons are of course valuable for comparison year by year, but their chief value lies in the fact that they enlist and compel attentive observation. The obvious mechanical feature is a genuine stimulus to that which has value in itself.

For a similar reason, an enthusiastic observer will take delight in the growth of his *life-horizon*. This is, in short, a list of all the birds he knows in the field. It should include only those species which he has actually met and so can identify afield. Now, whereas the accumulation of such a list, if it were merely for the sake of numerical comparison with some rival observer would be as vulgar as a collection of tobacco tags, it may be, on the other hand, if rightly conceived, a source of legitimate satisfaction. To be able to add year by year to your list of bird friends is no mean ambition. It will incite the student to a careful scrutiny of his own surroundings and give zest as well to the vacation trip or the change of residence.

The pleasure of such a life-list grows with increasing knowledge. The new bird, that would be a perfect enigma to the novice, drops at once into its appropriate niche with the man who has a field acquaintance with its congeners. Of course, there is a limit to this sort of thing, -namely, when one knows them all But this day fortunately is far distant from most of us. Meanwhile, we suspect, the flavor of the "new bird" improves to the taste with his increasing rarity. The veteran ornithologist. Dr. Coues, says—and we can almost hear him sighing—"For myself the time is past, happily or not, when every bird was an agreeable surprise, for dew-drops do not last all day; but I have never yet walked in the woods without learning something pleasant that I did not know before. I should consider a bird new to science ample reward for a month's steady work; one bird new to a locality would repay a week's search; a day is happily spent that shows me any bird that I never saw alive before." To take account of this last is the purpose of the life-horizon. WILLIAM L. DAWSON, Oberlin, Ohio.